

REVISION OF THE AUSTRALIAN CURCULIONIDÆ
 BELONGING TO THE SUBFAMILY
 CRYPTORHYNCHIDES.

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PART II.

In this part several genera close or moderately close to *Poropterus* are brought together. For *Poropterus porrigineus*, *P. lemur* and *P. tumulosus* new genera have been proposed; a number of species referred by Mr. Pascoe to *Acalles* are placed in *Decilaus*, and *Petosiris* has been regarded as a synonym of *Paleticus*.

Femora edentate.

Femora not grooved.

Elytra more or less distinctly tuberculate or fasciculate..... POROPTERUS.

Elytra not tuberculate or fasciculate..... ELÆAGNA.

Femora more or less distinctly grooved.

Elytra tuberculate.

Elytra rounded posteriorly..... MICROPOROPTERUS.

Elytra abruptly declivous posteriorly.

Mesosternal receptacle large and almost truncate in front.... PSEUDOPOROPTERUS.

Mesosternal receptacle small and curved..... POROPTEROIDES.

Elytra not tuberculate..... DECILAUS.

Anterior, posterior, or all the femora dentate.

Abdominal segments free..... HEXYMUS.

Two basal segments soldered together in middle.

Shoulders rounded, not at all produced..... PLATYPOROPTERUS.

Shoulders projecting..... PALETICUS.

Genus ELÆAGNA, Pascoe.

Trans. Ent. Soc. Lond., 1870, p. 461.

Head convex or flat; ocular fovea usually invisible. *Eyes* small, subpyriform, finely faceted, widely separated. *Rostrum* rather short, flat, wide, shorter than prothorax, straight or very

feebly curved, widening to base and apex. *Antennæ* short, rather thick; scape inserted almost in exact middle of rostrum and never reaching apex; funicle subcylindric, two basal joints elongate, the rest gradually widening; club short, ovate, continuous with funicle. *Prothorax* large, apex entire and overhanging head, base truncate, sides rounded, constriction absent, ocular lobes prominent. *Scutellum* absent. *Elytra* subparallel or gradually decreasing from base, no wider than prothorax, base truncate, shoulders feebly clasping prothorax or not. *Pectoral canal* wide and rather deep, terminating between two anterior pairs of coxæ. *Mesosternal* receptacle strongly raised, its apex thin and widely emarginate, rapidly sloping to base, middle of declivity subcostate, cavernous. *Metasternum* short. Basal segment of *abdomen* very large, almost as long as rest combined, sloping towards apex; 2nd subequal with intermediate at its middle, longer at sides; three apical enclosed within elytra and depressed; apical as long as intermediates; sutures of all very distinct. *Legs* moderately short; femora linear, edentate, posterior feebly passing elytra; tibiæ short, subcylindric, straight or almost straight; tarsi rather stout, subcylindric, spinose beneath, 3rd joint entire, similar to 2nd, claw-joint and claws long. Cylindric, elliptic, strongly convex above, punctate, squamose, setose, apterous.

I have three species (but only four specimens) under examination. They are all densely clothed with small scales mixed with a substance (indissoluble in alcohol) which causes them to appear as if covered with paste, and which is continued even to the claw-joint; the setæ are always visible, but in some places the scales are entirely concealed. The genus may be readily distinguished on account of its large prothorax, simple tarsi, and peculiar abdomen; the pectoral canal is densely squamose throughout. In describing the genus Pascoe says, "the hind femora not extending beyond abdomen." This is a mistake; if the femora be extended their full length it will be seen that they slightly pass the elytra, though in their ordinary position they do not appear to extend so far. All the species are black, with antennæ and claws dull piceous-red; the club slightly darker.

Of the three species described below *variolaris* is the most distinct; *inepta* is perhaps but a variety of *squamibunda*, but is sufficiently distinct to receive a name. They may be thus distinguished:—

Prothorax about half the size of elytra; elytral setæ irregular.....	<i>variolaris</i> , n.sp.
Prothorax much more than half the size of elytra; elytral setæ in regular rows.	
Suture at base of elytra feebly produced (base feebly bisinuate)..	<i>inepta</i> , n.sp.
Base of elytra truncate*....	<i>squamibunda</i> , Pasc.

ELÆAGNA SQUAMIBUNDA, Pasc.; Mast. Cat. Sp. No. 5454.

Densely covered with small, dingy, pale greyish-yellow scales entirely concealing derm except middle of intermediate abdominal segments, apical two-thirds of rostrum and antennæ; head and base of rostrum spongiose; antennæ feebly covered with a whitish substance and with small setæ. Punctures of prothorax and under surface each carrying a small pale seta, elytra with similar setæ but on interstices. Ciliation very short, moderately dense.

Head large, broad; ocular fovea traceable. Rostrum moderately elongate, densely and coarsely punctate. Scape considerably wider at apex than base; 1st joint of funicle longer than 2nd, 4th-7th transverse. *Prothorax* subobcordate, slightly longer than wide, with numerous small round pits in the scales marking position of punctures, and more feeble on the sides than disc. *Elytra* sloping to apex almost from base, apex very feebly emarginate; each with ten distinct striæ, the position of the punctures marked as on prothorax; interstices as wide as striæ and transversely impressed at each puncture, so that they appear to be formed of rows of flattened setose granules. *Under surface* with punctures almost concealed but marked by pale setæ. Length 8, rostrum $2\frac{1}{3}$, prothorax $3\frac{1}{2}$, elytra $5\frac{4}{5}$; width $3\frac{2}{3}$ mm.

Hab.—South Australia: Port Augusta.

* This distinction, though very slight, is sufficiently distinct to the naked eye.

For the opportunity of redescribing this species, I am indebted to Mr. George Masters.

ELEAGNA INEPTA, n.sp.

Similarly clothed to the preceding, but the scales paler and slightly more dense, the setæ paler and less noticeable except on the basal and apical segments of abdomen; head more densely clothed, apex of rostrum apparently washed with a whitish substance. Ciliation short, feeble.

Head moderately large, subconvex; ocular fovea invisible. Rostrum rather short, densely and coarsely punctate. Funicle with 1st joint distinctly longer and thicker than 2nd, 3rd-7th transverse. *Prothorax* obcordate, punctures as in preceding but larger and less numerous. *Elytra* with posterior declivity more abrupt than in preceding, the striæ more noticeable, interstices with fewer and less noticeable transverse impressions. *Under surface* as in preceding. *Legs* slightly longer, tibial hooks longer and thinner. Length 6 (vix), rostrum $1\frac{1}{2}$; width $2\frac{2}{3}$ mm.

Hab.—West Australia: Pelsart Island.

This species is extremely like the preceding, but differs in a number of details; besides the base of the elytra the ciliation of the ocular lobes is very different (a character which cannot be seen till the head is removed); there are slight differences in the clothing; the scape is scarcely the length of the two basal joints of funicle, in *squamibunda* it is slightly longer. The difference in size is not perhaps specific and the comparative length of rostrum may be sexual. My unique specimen was taken on a sandy beach close to a heap of seaweed; it was very ungainly in its movements and frequently toppled over; on a smooth flat surface it acted as if intoxicated, in this respect resembling several species of *Aterpus*.

ELEAGNA VARIOLARIS, n.sp.

Densely clothed with small muddy-brown scales entirely concealing derm, except mandibles and antennæ; a feeble patch of pale slaty-grey scales on each shoulder and on posterior declivity.

Antennæ setose, not at all squamose or mealy; setæ more distinct on prothorax and more numerous and irregular on elytra than in either of the preceding. Ciliation short, feeble.

Head rather small (for the genus), subconvex; ocular fovea appearing as a shallow transverse impression; densely punctate, the punctures distinct and setose. Basal two-thirds of rostrum punctate as head, apical third with punctures visible to derm. Funicle with 1st joint slightly longer than 2nd, 4th-7th transverse. *Prothorax* scarcely longer than wide, with moderately dense, large, round, shallow punctures, somewhat unevenly distributed and leaving a narrow interrupted median line, each puncture carrying a small seta which does not rise above the general level. *Elytra* slightly wider than base of prothorax, with nine rows of strongly impressed punctures, the two rows nearest the suture smaller and more distinct than the others; in the other rows they are larger, transverse and contiguous; interstices feebly raised, near suture straight, about the middle zigzag-shaped or appearing as a succession of small v's, apex with somewhat irregular punctures. *Under surface* much as in the two preceding species: mesosternal receptacle a little more noticeably raised and shorter from base to apex. Length 6, rostrum $1\frac{2}{3}$; width $2\frac{2}{3}$ mm.

Hab.—North West Australia: Upper Ord River (Mr. Richard Helms).

In this species the scales appear almost as if soldered to the derm; in the two preceding the clothing appears to be looser.

MICROPOROPTERUS, n.g.

Head feebly convex, ocular fovea very small. *Eyes* small, somewhat prominent, moderately faceted, distant. *Rostrum* subparallel, moderately elongate, comparatively slender, curved. *Scape* inserted slightly in advance of middle of rostrum, just reaching or slightly passing apex. *Prothorax* feebly transverse, ocular lobes feeble, constriction obsolete, base truncate, median line marked. *Scutellum* absent. *Elytra* not or scarcely twice the length of prothorax, wide, shoulders rounded. *Pectoral canal*

deep, terminated between anterior and intermediate coxæ. *Mesosternal receptacle* raised, semicircular, its apices touching anterior coxæ; cavernous. *Metasternum* short, curved. Two basal segments of *abdomen* large, intercoxal process wide, curved; intermediate very small, feebly depressed below apical and distinctly below 2nd, apical not as long as 2nd. *Legs* short; femora linear, edentate, the four posterior feebly grooved beneath, posterior not extending to apex of abdomen; tibiæ compressed, feebly curved; tarsi rather thick, 3rd joint distinctly bilobed, 4th feebly squamose. Short, subelliptic, convex, squamose, punctate, tuberculate, apterous.

The three species here described might perhaps be regarded as forming one of the divisions of *Poropterus*, but as their position is clearly intermediate between that genus and *Petosiris* I have considered it advisable to generically separate them. From *Poropterus* the species are excluded by their short broad form, transverse prothorax, large 2nd abdominal segment and small intermediates, and by the femoral grooving; from *Petosiris* (to which they are perhaps closer) by the much less flattened form, much less sudden compression of the apical abdominal segments by the elytra, feebly grooved and edentate femora, and by the tarsi, especially the 3rd joint. All the species are black, the antennæ, tibial hooks, and claws more or less red. They are very closely allied, but are certainly distinct; the following tabulation of the species is not very satisfactory.*

Elytral tubercles regularly disposed.....	<i>regularis</i> , n.sp.
Elytral tubercles somewhat irregular both in size and disposition.	
Elytra conjointly rounded at apex.....	<i>tumulosus</i> , Pasc.
Elytra feebly bifurcate at apex	<i>curvirostris</i> , n.sp.

MICROPOROPTERUS TUMULOSUS, Pasc.; Mast. Cat. Sp. No. 5443.

(*Poropterus tumulosus*, Pasc.)

Densely clothed with short greyish-brown scales, scales on tubercles paler than elsewhere. Scales of under surface and

* I scarcely think it desirable to give tabulations on characters of degree, unless such are very strongly marked and unmistakable.

legs paler than upper; tibiæ with obscure blackish rings. Head and rostrum densely squamose. Ciliation very minute and glassy.

Head convex, punctures concealed, ocular fovea invisible, a feeble depression between eyes. Rostrum moderately long, distinctly but not strongly curved, feebly dilated at apex. Scape inserted about two-fifths from apex of rostrum, just passing apex, two basal joints elongate, subequal, 3rd-7th transverse. *Prothorax* convex, sides rounded, apex narrowed, a depression along median line; with eight obtuse tubercles placed in two transverse approximate series, and a very obtuse tubercle on each side of apex; densely punctate, punctures almost concealed. *Elytra* subovate, base slightly wider than prothorax, widest a little behind middle, with rather large regular punctures partially concealed by scales; each with numerous small rounded tubercles smaller on posterior declivity than elsewhere; excluding these there are four on the 2nd interstice and a smaller one near base, two on each of the 4th and 5th, and a few smaller ones at the sides; apex conjointly rounded. Punctures of *under surface* entirely concealed. Length $6\frac{1}{2}$, rostrum $1\frac{2}{3}$; width $3\frac{1}{2}$ mm.

Hab.—South Australia (Messrs. Blackburn and Masters); “S. Australia and Tasmania” (Pascoc).

The scales on the upper surface of this species are very peculiar (in fresh specimens) appearing (owing to their slightly overlapping) as if they were themselves punctate.

MICROPOROPTERUS REGULARIS, n.sp.

Densely clothed with short ferruginous scales, and with sparser darker and more elongate scales, which at base of prothorax form a feeble triangular patch on each side; each elytral puncture with an elongate scale. Under surface with ferruginous scales becoming brown on abdomen, and on the legs mixed paler and more elongate ones; tibiæ with an indistinct dark ring; base and apex of pectoral canal sparsely squamose. Head densely squamose, a small dark patch on each side of middle; rostrum with dark scales at sides of base, almost nude elsewhere. Ciliation very minute, closely set, and silvery.

Head with a feeble tubercle on each side, ocular fovea invisible. Rostrum moderately long, curved, with feeble elongate punctures. Scape inserted slightly in advance of middle of rostrum, scarcely extending to apex; two basal joints of funicle equal, their combined length almost equal to that of scape. *Prothorax* feebly transverse, about as deep as long, apex rounded, about half the width of the base; feebly bifurcate, with two transverse rows of feeble tubercles; sides rounded, feebly decreasing to base; densely punctate, punctures partially concealed. *Elytra* subovate, base wider than prothorax, widest a little behind the middle, with regular rows of rounded tubercles, appearing regular when viewed longitudinally, transversely, or obliquely, placed on each elytron thus:— $\begin{matrix} \cdot & \cdot & \cdot & \cdot \\ \cdot & \cdot & \cdot & \cdot \\ \cdot & \cdot & \cdot & \cdot \\ \cdot & \cdot & \cdot & \cdot \end{matrix}$, with others less regular at apex and sides; a puncture between each tubercle, largest punctures at sides, smallest on posterior declivity. *Mesosternal receptacle* punctate, Basal segment of abdomen once and one-third longer than 2nd, at its sides scarcely longer. Length $6\frac{1}{2}$, rostrum $1\frac{3}{4}$; width $3\frac{1}{2}$ mm.

Hab.—Victorian Mountains (Rev. T. Blackburn's, No. 6213); New South Wales (Mr. W. Kershaw, Senr.), Orange (Mr. H. W. Brown), Glen Innes (Lea).

Two specimens from Mr. Kershaw are much abraded; on these the elytral punctures are seen to be large and regular and the tubercles smaller, and the under surface to be rather strongly punctate.

MICROPOROPTERUS CURVIROSTRIS, n.sp.

Clothed with small obscurely coloured scales, and with longer sooty scales marking prothorax at sides of apex and on each side of median line, and with others sprinkled about; elytral tubercles with sooty scales. Under surface with paler scales than upper, and mixed with ochreous on intermediates; legs with dark scales which are darkest on tibiae. Head and rostrum densely squamose, scales palest at base of former. Ciliation sparse and almost microscopic.

Head with trace of a very feeble tubercle on each side of middle; ocular fovea concealed. *Rostrum* moderately wide, distinctly curved. *Scape* inserted slightly in advance of the middle, scarcely extending to apex of rostrum; two basal joints of funicle equal, moderately elongate, the others transverse. *Prothorax* noticeably transverse, apex feebly bifurcate, not half the width of base; sides rounded, feebly decreasing to base. *Elytra* wider than prothorax, and not more than once and one-half its length, not much longer than wide, widest about the middle, each feebly separately rounded or bifurcate; punctures almost as in preceding; tubercles somewhat as in preceding but less regular when viewed obliquely; they are also less numerous and proportionally larger. Sutures of *abdomen* concealed by scales. Length 5, rostrum 1; width 3 mm.

Hab.—N.S.W.: Sydney.

Besides the difference in size and colour the present differs from the preceding species (of which I have both sexes) in having the rostrum thicker, shorter and more noticeably curved, the antennæ shorter and almost black (in that species they are decidedly reddish), the elytra broader and the apical curvature more pronounced, the third tarsal joint also a little narrower.

PSEUDOPOROPTERUS, n.g.

Head flattened; ocular fovea small. *Eyes* produced in front, moderately faceted. *Rostrum* thick, moderately curved. *Scape* inserted closer to apex than base of rostrum. *Prothorax* large, apex produced and overhanging head; ocular lobes and constriction feeble. *Scutellum* absent. *Elytra* not once and one-half the length of prothorax to which they are closely applied, posterior declivity almost vertical. *Pectoral canal* broad, deep, terminated at end of anterior coxæ. *Mesosternal receptacle* elevated, broad, apex almost truncate, triangularly decreasing to base; cavernous. *Metasternum* short. *Abdomen* flattened; basal segment very large, intercoxal process very broad, rounded; 2nd segment widely and abruptly excavated at its apex, its sides only entire; intermediates very short, strongly depressed below general level. *Legs* short,

thick; femora edentate, the four posterior (and less noticeably the anterior) grooved almost their entire length for reception of tibiæ, posterior just passing apex of elytra; tibiæ compressed, slightly curved; tarsi rather long, thick, 3rd joint not widely bilobed, 4th thick, inserted almost at extreme base of 3rd, squamose; claws free, not widely separated. Parallel-sided, convex, squamose, punctate, granulate, tuberculate, apterous.

Separated from *Poropterus* on account of the shape and position of mesosternal receptacle, shape of 2nd abdominal segment and strongly depressed intermediates, and the grooved femora.

PSEUDOPOROPTERUS LEMUR, Pasc.; Mast. Cat. Sp. No. 5431.

(*Poropterus lemur*, Pasc.)

Thick, subcylindrical. Black, opaque; antennæ and claws piceous. Clothed all over with minute, uniformly muddy or sooty-brown scales, a few more elongate towards sides. Under surface with similar scales to upper, but with the minute ones still more minute and the long ones longer, especially on legs. Head and rostrum equally clothed with minute scales, but the head from the middle to a short distance on rostrum with elongate scales. Ciliation of ocular lobes short, golden-yellow.

Head flat; ocular fovea elongate, almost obsolete. Rostrum thick, almost parallel to apex, coarsely punctate, punctures sometimes concealed, a feeble groove at sides on basal two-thirds, three feeble irregular carinæ between antennæ. Scape inserted about two-fifths from apex of rostrum and just reaching apex; 1st joint of funicle thick, but narrower than the others, 2nd once and one-half the length of 1st and nearly as long as the four following combined, 2nd-7th with three or four rows of coarse setæ; club free, subpyriform. *Prothorax* slightly longer than wide, and wider than deep; apex produced, narrow, subtruncate, not half the width of base; obliquely increasing in width to slightly in advance of middle, from thence feebly decreasing to base; densely granulate, the granules largest near base. *Elytra* not wider than greatest width of prothorax, and not once and one-half its length;

base feebly trisinate, shoulders feebly produced on to prothorax; densely and somewhat irregularly granulate, the granules—especially at sides—with a small shining tip; suture itself not granulate at the base. very feebly raised; 2nd interstice slightly raised and thickened at base; on each side of summit of posterior declivity (which is almost vertical) a large, very distinct, rounded, feebly granulate tubercle; sides with regular rows of very shallow punctures, but striation distinct, feebler and more interrupted on disc; apex rounded. Basal segment of *abdomen* not twice the length of 2nd, apical feebly convex, longer than 2nd and almost twice the length of intermediates. *Coxæ* more or less noticeably punctate; posterior femora in addition to the inner groove with a feeble outer one. Length 11, rostrum 4; width 5; variation in length 8-12 mm.

Hab.—Queensland: Cairns (Macleay Museum, and Mr. G. Masters), Mt. Bellenden-Ker (Rev. T. Blackburn).

The two large tubercles marking the summit of posterior declivity of elytra are very prominent, and cause the species to be one of the most distinct in the subfamily; owing to the declivity being almost vertical they project slightly beyond the apex.

POROPTEROIDES, n.g.

Differs from *Pseudoporopterus* in having the pectoral canal terminated at base of intermediate *coxæ*, mesosternal receptacle very feebly raised, its apices produced forwards and touching anterior *coxæ*, posterior *coxæ* less widely separated than intermediate (in that genus the separation is perceptibly wider) and closer to apex of abdomen, 3rd tarsal joint moderately but distinctly bilobed, 4th rather slender, pubescent, eyes coarsely granulate.

The two genera are undoubtedly very close, but as the mesosternal receptacle is so little subject to variation between congeners, and the difference between the two species is so striking (in *dichotomus* it might be likened to the third of a ring, and in *lemur* to the thick end of a blacksmith's anvil) that taking into

consideration the further structural differences mentioned (together with others which might only be regarded as specific) it appears advisable to generically separate the two species.

POROPTEROIDES DICHOTOMUS, n.sp.

Short, subcylindric. Black, opaque; antennæ and claw-joint piceous-red. Very densely clothed all over with ferruginous scales tinged with ochreous on posterior declivity and shoulders of elytra, paler beneath than above; pectoral canal densely clothed with scales which are paler and longer than elsewhere; elongate but coarse scales feebly showing on prothorax and base of elytra, more noticeably on tubercles at summit of declivity. Under surface and head between eyes with elongate scales. Rostrum with scales at base and sides, and with others smaller and sparser continued almost to apex. Ciliation sparse, short, white.

Head without visible fovea. Rostrum feebly increasing in width to apex; densely and irregularly punctate; a groove extending on each side from base to slightly in advance of antennæ, and with several less distinct grooves more or less interrupted by punctures. Antennæ elongate; scape inserted about one-third from apex of rostrum, passing apex; basal joint of funicle not much shorter than 2nd, 2nd no longer than the two following combined, 4th slightly longer than 3rd, 7th transverse; club free, elongate. *Prothorax* longer than wide, and slightly wider than deep, apex about one-third the width of base, obliquely increasing in width to about the middle, feebly decreasing from thence to base; disc convex. *Elytra* not much longer and very slightly wider than prothorax; posterior declivity almost vertical, broad and flat, and slightly longer than rest of elytra, its summit marked with two moderately distinct rounded tubercles on each side, one on 2nd the other on 3rd interstice, the scales on the tubercles slightly darker than on declivity, but paler than on disc; sides somewhat flattened, between tubercles and margins with seven rows of punctures, the striation distinct, but the punctures almost hidden, and entirely covered with scales.

Posterior *femora* slightly passing apex of elytra. Length 8, rostrum $2\frac{1}{2}$; width $3\frac{3}{4}$ mm.

Hab.—N.S.W.: Tweed River.

A very distinct species, rendered so by the length and abruptness of the posterior declivity, the elytra when seen from the sides (in conjunction with the sides of mesosternum) appearing almost quadrate. It is perhaps more densely clothed with scales than any other species allied to *Poropterus*; several species of the subfamily are squamose at apex or sides of pectoral canal, but in this species the canal is densely clothed with distinct scales for its entire length; the scales almost entirely conceal the sutures of the under surface. Seen from above the prothorax appears to be nearly the length of elytra.

Genus *DECILAU*S, Pascoe.

Trans. Ent. Soc., 1870, p. 205.

Head rather large, not concealed by prothorax. *Eyes* rather small, distant, coarsely faceted. *Rostrum* as long or slightly shorter than prothorax, curved, moderately wide, incurved to middle. *Antennæ* moderately long; scape inserted either slightly in advance of or slightly behind middle; two basal joints of funicle long, the others short and increasing in width to 7th; club continuous with funicle, subovate. *Prothorax* transverse, produced in front, sides rounded, base almost truncate; ocular lobes distinct and finely ciliate. *Scutellum* absent.* *Elytra* short, wide, slightly wider than prothorax at base. *Pectoral canal* wide, deep, terminated between intermediate coxæ. *Meso-sternal receptacle* raised, walls thin, emargination strongly transverse; cavernous. *Metasternum* very short. Two basal segments of *abdomen* large, intercoxal process very wide, truncate; intermediates very short. *Legs* short; femora moderately thick, edentate, very distinctly grooved, posterior terminating either at base or middle of apical segment of abdomen; tibiæ short; 3rd

* Except in *D. xanthorrhoeæ*.

tarsal joint moderately wide, deeply bilobed, claw-joint feebly pubescent; claws feeble. Elliptic-ovate or ovate, strongly convex, punctate, apterous.

This genus is one of the numerous allies of *Poropterus*; from that genus it is at once distinguished by its strongly grooved femora; *Microporopterus* also has grooved femora, but the eyes and intermediate abdominal segments are different.

The sexual differences are but slightly marked (I have taken pairs of several species *in cop.*). The male has the scape inserted slightly nearer the apex of rostrum than in the female, the rostrum is a little more densely punctate and the whole insect is smaller. The scape varies in length from little more than the length of two basal joints of funicle to the length of the funicle itself. The pectoral canal is squamose or setose in the majority of species. The two basal segments of the abdomen are large and usually equal, but the 1st is sometimes considerably larger than the 2nd; the intermediates can scarcely be said to be depressed below level of apical, though the greater part of each is usually depressed, leaving only a narrow ridge in front. The coxæ are almost contiguous laterally, though widely separated internally; the tibiæ are punctured in rows, and as each puncture carries a scale they appear to be grooved and to a certain extent resemble the tibiæ of many of the species belonging to *Melanterius* and *Tyrtæosus*. All the species are opaque or subopaque and black with dull red antennæ; the tibiæ and tarsi are sometimes tinged with red. They all (with the exception of *xanthorrhoeæ* and *hispidus*) live (during the day time at least) on, or just below the surface of the ground, or under logs and stones.

The type of the genus (*D. squamosus*) was described by Mr. Pascoe in 1870; but subsequently* he described a number of species and referred them to *Acalles*. Of the species referred by him to that genus and which certainly belong to *Decilaus*, I have been enabled to identify *perditus*, *distans*, *memnonius*, *foraminosus* and *cribricollis*; *A. nucleatus* I have not seen, but the

* Ann. Mag. Nat. Hist., (4), xiii. 1874, p. 415.

description leaves no doubt in my mind but that it belongs to *Decilaus*, and consequently I refer it to that genus. *Acalles* appears to be one of the old genera, to which (like *Chrysomela* and *Cryptorrhynchus*) all doubtful or obscure species were referred; the European *A. camelus* appears to be recognised as its type; regarding that species therefore as typical of its genus, *Decilaus* differs in having much shorter tibiæ, femora distinctly grooved, the posterior not extending to apex of abdomen, elytra wider than prothorax at the base, and the whole body shorter and stouter.

With long erect setose hair..... *hispidus*, n.sp.

Without long setose hair.

Ninth elytral interstice wide and highly polished..... *xanthorrhoeæ*, n.sp.

Ninth interstice normal.

Prothoracic punctures comparatively small and squamose.

Head with a median carina.

Prevailing colour of scales white *litoralis*, n.sp.

Prevailing colour of scales brown..... *perditus*, Pasc.

Head without median carina *squamosus*, Pasc.

Prothoracic punctures large or very large, irregularly or not at all squamose.

Intercostal process of abdomen without lateral sulci.

Head with large punctures equal throughout.. *subterraneus*, n.sp.

Head with moderately large punctures between eyes but small on vertex.

Suture of 1st and 2nd abdominal segments traceable throughout.... *distans*, Pasc.

Suture entirely obsolete in middle..... *foveiventris*, n.sp.

Intercostal process of abdomen with lateral transverse sulci.

Elytral punctures wider than interstices.

Second abdominal segment distinctly shorter than 5th..... *foraminosus*, Pasc.

Second segment equal to 5th..... *moluris*, n.sp.

Elytral punctures not, or scarcely wider than interstices.

Interstices with sparse minute punctures and without granules..... *memnonius*, Pasc.

Interstices with minute granules and without punctures..... *cribricollis*, Pasc.

DECILAUUS SQUAMOSUS, Pasc.; Mast. Cat. Sp. No. 5460.

Clothed with large white scales each set in a puncture and causing both upper and under surfaces to appear speckled. Scales denser on legs and sparser on apical segments of abdomen than elsewhere. Pectoral canal with white scales.

Head, especially on vertex, with considerably smaller punctures than on rostrum. Rostrum wide, feebly incurved to middle; with large and slightly irregular punctures. Scape the length of funicle, inserted nearer apex than base of rostrum and passing apex. *Prothorax* slightly transverse, apex not half the width of base; with moderate-sized regular round punctures almost concealed by scales. *Elytra* oblong-cordate, slightly wider than prothorax and not twice as long, widest slightly behind base; striate-punctate, punctures large, round, in places approximate but usually not; interstices equal in width or wider than punctures, towards apex and sides feebly granulate, with feeble punctures only visible on abraded specimens. Two basal segments of *abdomen* subequal, with large round and comparatively sparse punctures, apical segment densely punctate, intermediates narrowly raised anteriorly, depressed and with large scales posteriorly. Length 5, rostrum 1; width 2 mm.

Hab.—South Australia: Port Augusta.

The prothoracic punctures are deep but almost concealed by the large scales arising from each and which give the surface a speckled appearance; the elytral granules are little more than feeble and irregular elevations of the interstices, but appear to be true granules until the scales are abraded. I have three specimens (taken by Mr. Masters) under examination.

DECILAUUS PERDITUS, Pasc.; Mast. Cat. Sp. No. 5476.

(*Acalles perditus*, Pasc.)

Clothed with moderately large scales, varying in colour from white to brown; on the prothorax the scales are usually entirely brown and each one is set in a puncture; on the elytra there are

usually two or three pale irregular transverse fasciæ behind the middle and a distinct white longitudinal spot on each side of base; sometimes the whole elytra are sprinkled with white scales, and occasionally all the scales are brown. Scales on abdomen (except those of the intermediate segments) rather small. Pectoral canal with a few white scales.

Head with moderately large round shallow punctures in front, suddenly becoming minute on vertex; middle with a shining carina. Rostrum comparatively long, very feebly incurved to middle, densely and coarsely punctate. Scape as long as funicle, inserted nearer apex than base of rostrum and passing apex. *Prothorax* transverse, near apex suddenly and strongly narrowed; densely but not strongly punctate, punctures round, rather shallow and partially concealed; median line marked by a feeble impunctate space. *Elytra* oblong-cordate, slightly wider than prothorax and not twice as long, widest near base; striate-punctate, punctures moderately large, irregularly rounded; interstices convex, distinctly wider than punctures, with comparatively large punctures, towards apex and sides obsoletely granulate. *Abdomen* as in preceding. Length $4\frac{1}{3}$, rostrum $1\frac{1}{6}$; width $2\frac{1}{5}$; variation in length 4-6 mm.

Hab.—S.W. Australia: "Albany and Melbourne" (Pascoe).

Common under logs and stones in the coastal districts from Swan River to Albany. The species is allied to the preceding, but differs in the colour and size of its scales—prothoracic punctures much shallower; rostrum longer, &c. The clothing is subject to considerable variation and is very easily abraded.

DECILAEUS LITORALIS, n.sp.

Densely clothed with large white scales varying in places to pale ochreous-brown; elytra usually with six short basal stripes of pure white scales. Pectoral canal with a few white scales.

Head, rostrum and scape as in preceding. *Prothorax* transverse, apex much narrower than base; very densely punctate, punctures perfectly round, rather shallow, partially concealed; with or without a very feeble median line. *Elytra* large, at base slightly

wider than prothorax, considerably wider about the middle; striate-punctate, punctures comparatively small; interstices much wider than punctures, each with a distinct row of small punctate and rather distant granules. *Abdomen* as in two preceding species. Length $4\frac{1}{2}$, rostrum $1\frac{1}{4}$; width $2\frac{2}{3}$; variation in length $3\frac{1}{2}$ - $6\frac{1}{2}$ mm.

Hab.—W.A.: Geraldton and Swan River.

This species is exceedingly abundant under a spiny thick-leaved beach-growing plant about Geraldton; at Fremantle I have only taken three specimens. It may be distinguished from the preceding by its much paler scales, wider elytra, denser prothoracic punctures and more regular elytral granules; these in fresh specimens are very distinct and cause the elytra to appear regularly dotted with small black spots; in old or abraded specimens, however, they are less distinct. From *squamosus* it may be distinguished by its much wider elytra, carinate head, &c.

DECILAIUS XANTHORRHOÆ, n.sp.

Head feebly, the prothorax very feebly squamose; elytra rather densely squamose, the scales mostly black but with small spots of whitish scales irregularly distributed and more numerous towards apex than base. Under surface (except apical segment of abdomen where they are dense) with sparse greyish scales; legs with rather long white scales, femora feebly ringed. Pectoral canal not scaly.

Head depressed and with moderately strong punctures between eyes, becoming very small on vertex. Rostrum shining, feebly punctate, feebly but regularly and distinctly dilating to base and apex. Scape long, but shorter than funicle, inserted about two-fifths from apex of rostrum and passing apex. *Prothorax* slightly transverse, apical third not half the width of base; with dense, large, round, deep punctures. *Scutellum* present, but small and indistinct. *Elytra* subcordate, wider than prothorax at base and widest at about one-third their length from base; striate-punctate, punctures large, oblong, contiguous; interstices rather strongly convex and varying from a little narrower to a little wider than punctures; 9th interstice wide, flat, shining, impunctate and

without scales, sutural interstice for about one-third its length similar except that it slightly slopes to suture. Two basal segments of *abdomen* with large round punctures, the 1st with a distinct but shallow depression in the middle, apical segment densely punctate, intermediates flat, each with a transverse row of punctures, posteriorly not marked with large scales. Length 4, rostrum $1\frac{1}{6}$; width 2; variation in length $2\frac{1}{2}$ - $4\frac{1}{4}$ mm.

Hab.—W.A. : Swan River, Pinjarrah, Bunbury, &c.

Of this species I have seen thousands of specimens at the bases of the leaves of a common species of *Xanthorrhoea* and of *Kingia australis*. The sexes, apart from size (not, however, a reliable feature), are scarcely distinguishable; the male has a slightly longer scape, and the rostrum is a little more scaly at the sides. The punctures of the head are small compared with those of the preceding species, and very much smaller than those of the following. The shining rostrum, but particularly the sutural and 9th interstices, are very distinctive.

DECILAUUS FOVEIVENTRIS, n.sp.

Upper surface glabrous except for a small spot of dirty grey scales near the apex of each elytron. Under surface, legs, and pectoral canal with rather sparse dingy brown setose scales.

Head rather densely and strongly punctate between eyes, punctures much smaller on vertex; a feeble longitudinal excavation between eyes, behind which is a feeble ridge. Rostrum moderately long, feebly incurved to middle, with dense large punctures and a scarcely traceable median ridge. Scape slightly shorter than funicle, inserted about two-fifths from apex of rostrum. *Prothorax* moderately transverse, apex rounded; densely and strongly punctate, punctures round and deep, larger in middle of base than elsewhere. *Elytra* slightly wider than prothorax, very slightly wider behind than at base; striate-punctate, punctures large, suboblong, open posteriorly and diminishing in size towards apex; interstices slightly convex, wider than punctures, densely, minutely and irregularly granulate. *Metasternum* feebly depressed on each side. Two basal segments

of *abdomen* with very large, round, deep punctures or foveæ, suture between 1st and 2nd deep at the sides but not traceable across middle; intermediates each with a very feeble transverse setose row of punctures. Length $4\frac{1}{2}$, rostrum $1\frac{1}{4}$; width $2\frac{1}{2}$ mm.

Hab.—W.A.: Donnybrook.

Allied to the following species but may be distinguished by its larger abdominal foveæ, larger punctures of rostrum and smaller elytral punctures.

DECILAEUS DISTANS, Pasc.; Mast. Cat. Sp. No. 5468.

(*Acalles distans*, Pasc.)

Upper surface with a few whitish scales, not (to the naked eye) affecting the general colour, except near apex of elytra where a small distinct but somewhat irregular spot is condensed towards each side. Coxæ and sterna rather densely squamose. Pectoral canal with sparse setose scales.

Head with large punctures between eyes, becoming much smaller on vertex. Rostrum densely and strongly punctate, with or without several irregular impunctate spaces, very feebly incurved to middle. Scape shorter than funicle, inserted about two-fifths from apex of rostrum and passing apex. *Prothorax* transverse, apex not half the width of base; with large round punctures smaller at apex and middle than elsewhere. *Elytra* subcordate, wider than prothorax at base and widest just before middle; striate-punctate, punctures large, elongate-oblong, open posteriorly; interstices almost flat, considerably wider than punctures; densely and minutely granulate, each granule punctate in the middle. Two basal segments of *abdomen* with very large round and rather shallow punctures or small foveæ, suture between 1st and 2nd deep at sides and sufficiently distinct across middle; intermediates depressed posteriorly, each with a moderately distinct row of squamose punctures. Length $3\frac{1}{2}$, rostrum 1; width $2\frac{1}{3}$; variation in length $3\frac{1}{4}$ - $4\frac{2}{3}$ mm.

Hab.—W.A.: Swan River, Rottneest Island.

DECILAUUS MEMNONIUS, Pasc.; Mast. Cat. Sp. No. 5473.

(Acalles memnonius, Pasc.)

Glabrous except for a few indistinct pale yellow scales. Legs sparsely, pectoral canal not squamose.

Head large, with large round punctures, smaller (but still large) on vertex than between eyes. Rostrum feebly increasing from base to apex, moderately strongly but not densely punctate, punctures not confluent. Scape short, very slightly longer than two basal joints of funicle, inserted slightly nearer base than apex of rostrum and not extending to apex. *Prothorax* rather strongly transverse; with large round punctures very uniform in size, except that at apex they are smaller. *Elytra* subcordate, widest about the middle, thence arcuate to apex; striate-punctate, punctures large, round or almost round, feebly or not at all open posteriorly; interstices at suture the width of, towards the sides slightly wider than punctures, convex, with scattered minute punctures and without granules. *Metasternum* with a distinct transverse impression on each side. Basal segment of *abdomen* with moderately large punctures, intercoxal process with a distinct transverse sulcus on each side, separated by an impunctate ridge; 2nd segment with very large punctures or foveæ, the suture between 1st and 2nd marked with large punctures; intermediates each with a row of about eight small but distinct punctures across the middle. Length $3\frac{1}{2}$, rostrum 1 (vix); width 2; variation in length $3\frac{1}{2}$ -5 mm.

Hab.—W.A. : “King George’s Sound” (Pascoe); Bridgetown, Donnybrook (Lea).

May be readily distinguished from any of the preceding species by the shortness of its scape and the position of its insertion. One of the following species (*D. cribricollis*), however, resembles it in this respect.

DECILAUUS MOLURIS, n.sp.

Upper surface, head, and pectoral canal glabrous. Under surface and legs with rather long white setose scales.

Head large, rather strongly convex, densely, strongly and equally punctate throughout. Rostrum slightly shining, basal two-thirds subparallel, apex enlarged, not very densely or coarsely punctate, an almost impunctate median space. Scape the length of four basal joints of funicle, in ♀ inserted almost in exact middle of and just extending to apex of rostrum, in ♂ inserted slightly nearer to and just passing apex. *Prothorax* feebly (by measurement) transverse, but apparently as long as wide, apex depressed and subtubular, with dense large round regular punctures smaller at apex than elsewhere. *Elytra* subcordate, slightly wider than prothorax at base, widest slightly before middle; punctures large, oblong; interstices narrower than punctures, especially those in the 5th-7th striae, irregularly and feebly wrinkled and obsolete punctate. *Metasternum* with a depression on each side. Basal segment of *abdomen* rather feebly and irregularly punctate, intercoxal process with a feeble sulcus on each side, 2nd segment rather more strongly punctured than 1st, its length in the middle equal to that of 5th; intermediates each with two very irregular rows of squamose punctures. Anterior *femora* with a very feeble tooth visible from but few directions. Length 4, rostrum 1; width $2\frac{1}{2}$ mm.

Hab.—W.A. : Albany (Masters and Lea).

Although by actual measurement this species is seen to be not twice as long as wide, it appears to be much longer. Of the two other species (*foraminosus* and *subterraneus*) having the head strongly and equally punctate, the present may be distinguished by its more elongate shape, but especially by its much less coarsely punctured prothorax and femoral tooth (if such it can be called, as it appears to be a feeble triangular extension of the ridge bordering the median groove). Mr. Masters has lent me two specimens labelled *Tentegia hypocrita*, Pasc. MS.; the species, however, is a true *Decilaus*; *Tentegia* is described as having linear tarsi.

DECILAEUS SUBTERRANEUS, n.sp.

Each prothoracic puncture with a setose scale varying in colour from white to slaty-brown or black; elytral interstices with more

numerous scales but smaller and rounded, with or without several very feeble transverse fasciæ of white scales towards apex. Under surface rather sparsely squamose; femora more or less distinctly ringed. Pectoral canal glabrous.

Head densely, strongly and equally punctate. Rostrum slightly dilated towards apex, strongly punctate, the punctures in irregular grooves, and leaving a shining median space. Scape the length of four basal joints of funicle, inserted nearer apex than base of rostrum and passing apex. *Prothorax* distinctly transverse; with very large round deep punctures or foveæ. *Elytra* subglobose; with large suboblong punctures, in places subcontiguous; interstices feebly convex, wider than punctures. *Metasternum* transversely impressed on each side. Basal segment of *abdomen* considerably larger than 2nd, with a shallow median depression, irregularly punctate, punctures much larger at sides than in middle, 2nd with two irregular rows of very large punctures; intermediates irregularly punctate. Length $3\frac{4}{5}$, rostrum 1; width $2\frac{1}{2}$ mm.

Hab.—W.A.: Rottneest Island.

Several specimens obtained underground close to a wall. This species is allied to *foraminosus*, agreeing in the very large prothoracic punctures (which are very much larger than in the other species here described) and subglobose elytra, but differing in the elytral interstices and intercoxal process of abdomen. The elytra measure 3 mm. in a line taken diagonally from base to apex, but only $2\frac{1}{4}$ horizontally.

DECILAEUS FORAMINOSUS, Pasc.; Mast. Cat. Sp. No. 5471.

(*Acalles foraminosus*, Pasc.)

Prothorax squamose as in the preceding; elytral interstices with a few greyish scales and a feeble whitish scale in each puncture. Under surface and legs with whitish scales and setæ. Pectoral canal glabrous.

Head, rostrum, and *prothorax* as in preceding. *Elytra* subglobose; with very large subquadrate or quadrate punctures, the walls of which are obliquely sloped to the bottom, especially

in the 5th-7th striæ where the punctures are exceedingly large: interstices much narrower than punctures, convex, distinctly but sparsely and irregularly punctate. *Metasternum* with a distinct depression in middle, narrowing to the sides. *Abdomen* irregularly punctate, basal segment raised above and almost twice the length of 2nd, intercoxal process with a transverse sulcus on each side. Length $3\frac{1}{2}$, rostrum 1 (vix); width $2\frac{1}{3}$; variation in length $3\frac{1}{2}$ -5 mm.

Hab.—W.A.: "Albany" (Pascoe), Bridgetown (Lea).

DECILAU CRIBRICOLLIS, Pasc.; Mast. Cat. Sp. No. 5466.

(*Acalles cribricollis*, Pasc.)

Upper surface and pectoral canal clothed as in preceding. Abdomen and sterna with a few white scales almost hidden in punctures.

Head densely and moderately strongly punctate, punctures larger between eyes than elsewhere. Rostrum wide, feebly but noticeably incurved to middle, irregularly punctate, punctures forming lateral grooves. Scape short, scarcely longer than two basal joints of funicle, inserted nearer base than apex of rostrum and not extending to apex. *Prothorax* strongly transverse: with dense large punctures. *Elytra* subcordate, wider than prothorax at base; striate-punctate, punctures large, round or elliptic, distant towards the sides, moderately close towards suture; interstices rounded, much wider than punctures, with minute scattered granules and without punctures. *Metasternum* with a deep impression on each side. Basal segment of *abdomen* almost twice the length of 2nd, with large punctures at sides but small ones in middle, intercoxal process with a deep transverse sulcus on each side; 2nd segment with from eight to ten very large round punctures or foveæ forming a transverse row, and about five marking its suture with 1st; intermediates with a few minute punctures. Length 5 (vix), rostrum ♂ $1\frac{1}{6}$, ♀ $1\frac{1}{3}$; width $3\frac{1}{2}$ mm.

Hab.—W.A.: "Champion Bay" (Pascoe); Rottnest Island (Lea).

Allied to *memnonius*, but with comparatively smaller and less regular elytral punctures, the interstices granulate instead of

punctate, and the elytra themselves considerably wider, wider in fact than in any other species of the genus (width $3\frac{1}{2}$; length diagonally $3\frac{3}{4}$, horizontally $2\frac{1}{3}$ mm.).

DECILAEUS HISPIDUS, n.sp.

Clothed with straggling semi-erect hair or very long setæ, mostly black in colour but the prothorax with several feeble clusters of white hairs; elytra with three feeble but distinct stripes of white hairs, one at base, one at summit of posterior declivity, and one between summit and apex. Sterna and two basal segments of abdomen with long white setose hair; legs with long white setæ. Pectoral canal glabrous.

Head with large punctures; eyes prominent. Rostrum rather long, irregularly punctate, punctures of moderate size, and denser towards sides than middle. Scape long, the length of funicle, inserted two-fifths from apex of rostrum and passing apex. *Prothorax* strongly transverse, with dense large round and moderately deep punctures. *Elytra* briefly subcordate, considerably wider than prothorax at base; punctures large, oblong, interstices shining, feebly raised, flat, with very minute punctures and granules towards apex. Basal segment of *abdomen* twice the length of 2nd, densely and strongly punctate, 2nd depressed below 1st, its suture with that segment marked by a row of large punctures; intermediates minutely punctate, the 3rd distinctly narrower than the 4th. Length 2, rostrum $\frac{1}{2}$; width $1\frac{1}{8}$ mm.

Hab.—W.A.: Rottneſt Island.

A small but very distinct species of which I have seen but one specimen. I believe I am right in referring it to *Decilaus*, although its clothing is at variance with the other species of the genus. The eyes are a little more prominent than is usual, but the rostrum, antennæ, pectoral canal, abdomen and legs are those of *Decilaus*.

DECILAEUS NUCLEATUS, Pasc.; Mast. Cat. Sp. No. 5474.

(*Acalles nucleatus*, Pasc.)—I am unacquainted with this South Australian species, but it appears to be a true *Decilaus*.

Genus HEXYMUS, Pascoe.

Journ. Linn. Soc. Zool. xi. p. 188.

Head rather small, not entirely concealed by prothorax; ocular fovea small, distinct or not. *Eyes* large, moderately granulate, subtriangularly produced in front. *Rostrum* long, thin, curved. *Antennæ* long and thin; scape inserted nearer apex than base of rostrum, in ♀ slightly, in ♂ considerably passing apex; 2nd joint of funicle long; club ovate, free, joints oblique. *Prothorax* slightly transverse, apex much narrower than base; ocular lobes obtuse; constriction feeble; base bisinuate; sides precipitous; scutellar lobe small. *Scutellum* small, distinct, not depressed. *Elytra* wider than prothorax and about twice its length, apex narrow, conjointly rounded, posterior declivity (along suture) subequal to anterior portion. *Pectoral canal* narrow, deep, terminated near bases of intermediate coxæ. *Mesosternal receptacle* feebly raised, base and sides thin, apices touching anterior coxæ, emargination considerably longer than wide, slightly cavernous. *Metasternum* very narrow, constricted in middle, dilated towards episterna; these moderately large, the length of two basal segments of abdomen. *Abdomen* regularly decreasing in width to apex, sutures distinct; basal segment almost twice the length of 2nd, intercoxal process moderately narrow, rounded, intermediates combined longer than 2nd or apical and not at all depressed. *Legs* long; posterior trochanter distinctly smaller than visible parts of coxæ; femora scarcely grooved, each with a distinct sharp tooth, posterior in ♂ passing, in ♀ scarcely extending to apex of elytra; tibiæ thin, compressed, curved; tarsi slender, 1st joint grooved beneath, 3rd rather small, deeply bilobed, 4th long, pubescent or not; claws widely separated. Short, broad, deep, squamose, punctate, tuberculate, apterous.

Mr. Pascoe says that this genus is "apparently allied to *Poropterus*, although the metathoracic episterna are very large." It does not appear to be close to any described Australian genus (except possibly *Plagiocorynus*), though to a certain extent resembling *Petosiris*, *Onidistus*, &c.

- Prothoracic carina strongly elevated on apical half,
 subobsolete on basal *tuberosus*, Pasc.
 Prothoracic carina narrow and regular throughout.
 Antennæ dull brownish-red, each elytron with five
 tubercles..... *monachus*, Pasc.
 Antennæ pale red, each elytron with four flattened
 tubercles..... *subplanatus*, n.sp.

HEXYMUS MONACHUS, Pasc.; Mast. Cat. Sp. No. 5417.

Black, opaque; antennæ dull red, club and apex of scape darker, apical half of rostrum highly polished. Upper surface moderately densely clothed with small and moderate scales, uniform in colour but varying in different specimens from slaty to sooty or ferruginous-brown. Under surface more densely clothed than upper and with elongate paler scales scattered about, a feeble stripe continuous from mesosternum to apex of abdomen, visible to the naked eye but confused with a lens; femora with a few pale scales towards apex; head and basal half (or third) of rostrum densely squamose. Ciliation silvery-yellow, moderately short.

Head with ocular fovea distinct; shallowly punctate, punctures concealed. Rostrum longer than prothorax, narrow, strongly curved, a feeble carina commencing at base and terminating before insertion of antennæ (more distinct in ♂ than in ♀); apical half moderately strongly punctate in ♂, sparsely and minutely in ♀. Antennæ long; scape inserted one-third from apex of rostrum and passing for one-third its length in ♂, in ♀ inserted two-fifths from apex and just passing; 2nd joint of funicle twice the length of 1st and the length of 3rd-5th combined and slightly longer than club. *Prothorax* impunctate, with a distinct, narrow, shining, median carina, continuous and regular from base to apex; with several obtuse tubercles or slight swellings of which a moderately distinct one is on each side near carina and nearer base than apex. *Elytra* at base wider than prothorax, widening to beyond the middle, basal half somewhat flattened and with precipitous sides; each with five moderately large elongate tubercles, two on the 3rd, two on the 5th interstices, and one on the 4th intermediate in position; strongly seriate-punctate,

punctures rounded, not at all contiguous; posterior declivity at an angle of about 45° , rather feebly punctate, a feeble callosity on each side. *Claw-joint* distinctly pubescent. Length $8\frac{1}{2}$; rostrum $2\frac{2}{3}$; width 4 (vix); variation in length 7- $10\frac{1}{2}$ mm.

Hab.—Coastal Districts of Queensland and Northern New South Wales.

An abundant species.

HEXYMUS TUBEROSUS, Pasc.; Mast. Cat. Sp. No. 5418.

Black, opaque; antennæ dull red, club darker; rostrum, except basal fourth, highly polished. Densely clothed with uniformly brown scales; on the upper surface larger scales are regularly scattered over the prothorax and on elytral tubercles; each puncture carries a still larger scale; on the under surface the larger scales are more numerous than on prothorax and there is a still fainter median stripe than in the preceding. Ciliation minute, bright silvery.

Head slightly depressed at base; ocular fovea feeble. Rostrum longer than prothorax, curved, impunctate in ♀, without carina. Antennæ rather more elongate than in the preceding, the 2nd joint perfectly straight and considerably longer than club. *Prothorax* impunctate; a distinct squamose carina on apical half, which is strongly elevated almost in middle, thence towards base it is almost invisible; a moderately distinct tubercle on each side of carina near middle. *Elytra* at base scarcely wider than prothorax, feebly widening to about the middle, basal half not flattened, sides precipitous; each with four large and very distinct tubercles, two on the 3rd and two on the 5th interstices; suture with distant, small glossy granules; seriate-punctate, punctures rounded, smaller and more distant than in the preceding; posterior declivity at an angle of about 35° , rather feebly punctate, two feeble callosities on each side. *Claw-joint* feebly pubescent. Length $8\frac{1}{2}$; rostrum $2\frac{2}{3}$; width $3\frac{2}{3}$; variation in length $8\frac{1}{2}$ -10 mm.

Hab.—Coastal Districts of Queensland and Northern New South Wales.

Very distinct from the preceding species on account of its stronger and less numerous elytral tubercles and very different prothoracic carina

HEXYMUS SUBPLANATUS, n.sp.

♀. Black, opaque; antennæ pale red, club slightly darker; rostrum, except basal fourth, highly polished. Upper surface densely clothed with minute muddy-brown scales and with elongate darker scales scattered about, especially on prothorax. Under surface and legs more densely clothed than upper and with numerous elongate scales; head and basal fourth of rostrum densely squamose. Ciliation minute, silvery.

Head slightly convex, ocular fovea invisible. Rostrum somewhat stouter than in either of the preceding, basal third rather strongly carinate and punctate, elsewhere minutely and sparsely punctate. Antennæ moderately long; scape inserted slightly in advance of middle of rostrum and just passing apex; 2nd joint of funicle scarcely twice the length of 1st, slightly longer than three following combined and slightly shorter than club, 7th distinctly transverse. *Prothorax* as in *monachus* except that the sides are less rounded in the middle and the disc less convex. *Elytra* at base wider than prothorax and widening to beyond the middle, basal half somewhat flattened, sides precipitous; each with four moderately large flattened tubercles, two on the 3rd and two on the 5th interstices, suture with about six small granules; seriate-punctate, punctures near suture large, subquadrate, subapproximate; posterior declivity at an angle of about 60°, somewhat rounded, distinctly but not strongly punctate, without callosities. *Claw-joint* glabrous. Length $6\frac{1}{2}$, rostrum $2\frac{1}{4}$; width $3\frac{1}{3}$ mm.

Hab.—N.S.W.: Burrawang (Mr. T. G. Sloane).

In appearance closer to *monachus* than the preceding; differs in its much stronger sutural punctures, each elytron with but four tubercles, much paler antennæ the funicular joints of which are shorter, slightly shorter and wider rostrum, &c.; from the preceding the shape of the elytral tubercles and prothoracic carina at once distinguish it.

PLATYPOROPTERUS, n.g.

Head convex, almost concealed by prothorax; ocular fovea distinct. *Eyes* widely separated, moderately faceted. *Rostrum* curved, moderately stout, shorter than prothorax. *Antennae* moderately stout; scape inserted nearer apex than base of rostrum and passing apex: two basal joints of funicle elongate; club ovate, free. *Prothorax* feebly transverse, ocular lobes feeble and rounded, constriction slight, base bisinuate. *Scutellum* absent. *Elytra* large, shoulders rounded, apex acuminate, sides declivous. *Pectoral canal* deep and moderately wide, terminated between four anterior coxæ. *Mesosternal receptacle* raised, semicircularly emarginate in front, rounded behind, cavernous. *Metasternum* short, episterna concealed. *Abdomen* large, two basal segments soldered together in middle and two-thirds of total length; intermediates with deep sutures, conjointly considerably shorter than 2nd or 5th, below level of 2nd but not of 5th. *Legs* moderately long; femora moderately stout, very feebly grooved, the anterior scarcely visibly dentate, the others edentate, posterior scarcely extending to apical segment of abdomen; tibiæ compressed, the anterior bisinuate beneath, the others straight; tarsi short, moderately stout, 3rd joint short, deeply bilobed, claw-joint slightly longer than 1st: claws moderately separated. Flat, squamose, punctate, apterous.

The type and only known species of this genus is the *Poroapterus porrigineus* of Pascoe. It is separated from *Poroapterus* on account of its grooved femora and the basal segments of abdomen being soldered together; from *Paleticus* by the shorter tarsi, base of elytra not trisinuate, straight tibiæ, &c.

PLATYPOROPTERUS PORRIGINEUS, Pasc.; Mast. Cat. Sp. No. 5436.

(*Poroapterus porrigineus*, Pasc.)

Black, opaque; antennæ (club darker), tibial hooks and 3rd and 4th tarsal joints piceous-red. Sparsely clothed with small ochreous or brownish scales irregularly distributed and denser on prothorax than elsewhere; in addition with darker and suberect

scales, forming feeble fasciculate patches on prothorax on each side of median line (itself marked by paler scales) and at its sides; elytra with small patches irregularly disposed, but forming a moderately distinct (but feeble) transverse double series about summit of posterior declivity. Under surface (including pectoral canal) moderately clothed with dingy brown suberect scales. Legs with similar but longer scales, the femora in addition marked with two feeble paler rings; tibiæ terminated by a fringe of reddish setæ; tarsi spongiose beneath, feebly clothed above.

Head with the exposed portion small and irregular; obsolete punctate; a feeble carina on vertex; ocular fovea deep, long and very distinct. Rostrum curved, feebly incurved to middle, apex the width of base; rather coarsely punctate on each side of base, apical half polished and moderately densely punctate; a groove on each side parallel with scrobes commencing just in front of antennæ and continued around upper portion of eyes. Scape inserted about two-fifths from apex of rostrum, nearly half passing; funicle with 1st and 2nd joints equal, their combined length almost equal to that of 3rd-7th. *Prothorax* transverse ($3\frac{2}{3} \times 3$), flat, sides dilated in middle; impunctate on disc, strongly on flanks. *Elytra* subovate, nearly thrice the length of prothorax, not much wider at base but considerably wider about apical third, each separately rounded at base, coarctate towards apex, apex conjointly rounded; disc with large punctures or small foveæ, subseriately arranged and becoming smaller and feebler towards apex; flanks (except above base) with a double row of large punctures, an additional row but of smaller punctures just below disc; each side of suture from base to about middle with a row of small hollow granules.* *Under surface* impunctate. Metasternum longitudinally grooved in middle, the grooves partially concealed by scales. Intercostal process of abdomen with two short, deep, longitudinal sulci, connected with sides by feeble subpunctate

* These granules are moderately distinct and each appears as if it had been scooped out, leaving only a narrow rim behind.

grooves. Anterior *legs* noticeably shorter and stouter than posterior. Length 9, rostrum 2; width $4\frac{1}{2}$ mm.

Hab.—"Victoria" (Pascoe). N.S.W : Mount Kosciusko (Mr. W. E. Raymond), Orange (Mr. Horace W. Brown).

I have two specimens under examination, one of which is partially abraded; it appears to have darker clothing than the other specimen; its elytra are not so much dilated beyond the middle; its prothorax is scarcely transverse and the granules on the elytra are less numerous, being five on one side and four on the other, as against eight on each side of the other specimen; it is perhaps a female, but I can find no sexual differences in the rostrum and antennæ.

Genus PALETICUS, Pascoe.

Trans. Ent. Soc. 1870, p. 462.

Head not concealed by prothorax, vertex with four more or less distinct impressions, transversely depressed between eyes. *Eyes* large, moderately (not coarsely) faceted. *Rostrum* long, thin or moderately thin, almost parallel-sided, distinctly curved. *Antennæ* thin; scape inserted nearer apex than base of rostrum, passing apex; two basal joints of funicle elongate; club moderately elongate, free. *Prothorax* transverse, flat or moderately convex; ocular lobes obtuse, ciliate; constriction feeble; base strongly bisinuate; scutellar lobes distinct. *Scutellum* almost invisible,* situate in a depression. *Elytra* subcordate, wider than prothorax, basal two-thirds more or less flattened and parallel, base trisinate, sides towards apex coarctate, conjointly rounded, sides inwardly oblique. *Pectoral canal* deep, terminated between intermediate coxæ. *Mesosternal receptacle* feebly raised, base and sides rather thick, emargination in ♂ slightly wider than long, in ♀ slightly longer than wide; cavernous. *Metasternum* very short. Two basal segments of *abdomen* large, soldered together, suture scarcely traceable across middle; intercoxal process broad, deeply

* Except in *cordipennis*.

sulcate laterally, three apical segments greatly narrowed by elytra, intermediates conjointly shorter than 2nd or apical. *Legs* long; femora dentate; tibiæ flexuous; tarsi elongate, narrow, above glabrous or with sparse setæ, 3rd joint short, slightly wider than long, deeply bilobed, 4th longer than 1st. Broad, squamose, apterous.

This genus was founded by Mr. Pascoe on five species, of which I know *pedestris* and *frontalis*. Of the others, I am doubtful of *laticollis* and *confinis*, which, however, are very close to *pedestris*; *invidus* although recorded from "Gawler, Victoria, Sydney, and Queensland" I have not seen, or at least been enabled to identify. In the same paper in which Mr. Pascoe described *Paleticus* he very briefly described *Petosiris*, comparing it with *Onidistus*. In describing the genus only one species (*P. subereus*) was referred to it; this species is a true *Paleticus* differing in no essential detail from *P. pedestris*; I think, therefore, that the name *Petosiris* should be sunk as a synonym of *Paleticus*. Subsequently Mr. Pascoe referred two species (*cordipennis* and *annulipes*) to *Petosiris*; both these species I know; *cordipennis* (although somewhat aberrant) I refer to *Paleticus*; for *annulipes* (the tarsi of which are very different to those of *subereus* or *cordipennis*) a new genus is required.

Paleticus is allied to *Poropterus*, but it is abundantly distinct from that genus by the two basal segments of abdomen being soldered together and the dentate femora.

Mr. Pascoe describes the eyes as "grosse granulati"; this is erroneous, the granulation of the eyes being only moderate; and (except in *frontalis*) they might even be called finely faceted; at the top they are slightly bent over. He makes no mention of femoral teeth (except in *frontalis*), although such are present in all the species I have examined. In all the species the base of the elytra is shaped like Cupid's bow.

Prothorax flat, walls abruptly vertical.

Posterior femora passing elytra..... *pedestris*, Pasc.

Posterior femora not passing abdomen.

Tibial hooks short and blunt..... *arciferus*, n.sp.

Tibial hooks longer and sharp.

Tibial hooks longer and sharp.

Second joint of funicle no longer than 1st. *subparallelus*, n.sp.

Second joint of funicle distinctly longer

than 1st:..... *quadraticollis*, n.sp.

Prothorax more or less rounded.

Scutellum distinct, not depressed..... *cordipennis*, Pasc.

Scutellum indistinct, within a depression.

Elytra impunctate, tuberculate..... *subereus*, Pasc.

Elytra punctate, non-tuberculate..... *frontalis*, Pasc.

PALETICUS PEDESTRIS, Pasc.; Mast. Cat. Sp. No. 5459.

Black, opaque; scape and club dull reddish-brown, funicle dingy-red, tarsi piceous, two apical joints paler. Moderately clothed with ferruginous-brown scales of two sizes—small round ones closely adpressed to derm, and moderately elongate spatulate scales, which on the prothorax form four feeble clusters (scarcely fascicles) across middle, and are moderately dense towards apex, on elytra irregularly distributed and forming several fascicles—a distinct transverse one on each side at summit of posterior declivity, two feeble ones between it and base, and a feeble one towards apex. Under surface and legs with small scales and with elongate sub-setose scales. Head and base of rostrum squamose.

Head somewhat depressed and marked with four shallow impressions, leaving three very feeble tubercles (of which the median one is elongate and the others rounded), a transverse impression between eyes. Rostrum long and thin, basal third strongly punctate, thence to apex finely punctate and shining, a shallow lateral sulcus on each side immediately above scrobes, commencing at eyes and terminating before antennæ. Second joint of funicle twice the length of 1st. *Prothorax* transverse ($4\frac{1}{3} \times 3\frac{1}{2}$), flat, apex rounded, basal three-fourths parallel-sided, base strongly bisinuate, scutellar lobe distinct; impunctate. *Scutellum* indistinct. *Elytra* subcordate, at base wider than prothorax, widest at about apical third, sides near apex coarctate, an elevated subtubercular lobe on each side of scutellum, shoulders produced and subtuberculate; basal two-fifths with large punctures (about 15 on each elytron), sides with three rows of feeble punctures. *Legs* long; femora dentate, posterior passing apex of

elytra, teeth of intermediate femora very feeble, the others small but acute. Length $11\frac{1}{2}$, rostrum $3\frac{1}{2}$; width 6; variation in length $10\frac{1}{2}$ -12 mm.

Hab.—"Queensland" (Pascoe). N.S.W.: Tweed and Richmond Rivers (Lea).

As I have not been enabled to positively identify *laticollis* I have taken this species as typical of the genus.

PALETICUS ARCIFERUS, n.sp.

Colour and clothing much as in the preceding, except that the small scales are much more numerous and that there are two transverse fascicles on each elytron, and several small irregular tufts scattered about.

Head with a longitudinal carina in middle, on each side of it a feeble elliptic oblique tubercle. Rostrum long and thin, excavated in middle of base and on each side so that at near base it appears to be quadricostate, towards apex obsolete punctate and shining. Second joint of funicle about once and one-half the length of 1st. *Prothorax* transverse ($3\frac{2}{3} \times 2\frac{3}{4}$), feebly convex, apex rounded, basal three-fourths almost parallel, base strongly bisinuate. *Scutellum* indistinct. *Elytra* cordate, sides rounded, widest slightly before the middle, subtuberculate on each side of scutellum, shoulders feebly produced and subtuberculate, basal half and sides punctate but punctures almost concealed. *Legs* comparatively short; femora minutely and indistinctly dentate, posterior extending to about middle of apical segment of abdomen; tibial hooks (especially the posterior) short and blunt. Length $10\frac{1}{6}$, rostrum $3\frac{1}{4}$; width $5\frac{1}{2}$ mm.

Hab.—Queensland: Cairns (Macleay Museum).

Differs from the preceding in its shorter legs and 2nd joint of funicle, less flattened prothorax and elytra, tibial hooks, &c.

PALETICUS SUBPARALLELUS, n.sp.

Colour as in *pedestris*. Moderately clothed all over with small round ochreous-brown scales, and with longer spatulate scales forming four rather large and moderately well defined lines on

prothorax—one on each side, and one on each side of median line; elytra with alternate interstices irregularly fasciculate, but a distinct transverse fascicle on each side at summit of posterior declivity, behind the fascicles the scales are paler, and towards the apex have a tendency to run in rows. Under surface and legs more densely squamose than above; head and basal half of rostrum squamose.

Head and rostrum as in preceding, except that the rostrum is rather more coarsely punctate. Two basal joints of funicle equal, or the 1st (if anything) slightly longer than 2nd. *Prothorax* flat, transverse ($3\frac{1}{2} \times 3$), apical sixth rounded, sides almost parallel. *Scutellum* indistinct. *Elytra* not much wider than prothorax, sides rather feebly rounded and subarcuate towards apex, disc feebly rounded and with moderately large punctures in feeble rows, of which the sutural row is indistinctly continued to apex, sides with four feeble rows of punctures; subtuberculate on each side of scutellum; shoulders very feebly produced and scarcely tuberculate. *Legs* long; femora feebly (the intermediate scarcely visibly) dentate, posterior terminating at apex of abdomen but not of elytra. Length 10, rostrum 3; width 5 (vix) mm.

Hab.—Queensland: Cooktown (Herr J. Faust).

A distinct species on account of the relative lengths of the two basal joints of funicle and its subparallel form. *P. laticollis* resembles it (according to the description) in the funicle, but is described as being flattened about the scutellum and with very different clothing. In the figure of that species also the posterior femora are made to terminate considerably before the apex of elytra.

PALETICUS QUADRATICOLLIS, n.sp.

Colour and clothing much as in *pedestris*, except that the small scales are more numerous, and that there is but one fascicle on each elytron.

Head with three feeble elevations on vertex; transversely impressed and with a small deep fovea between eyes. *Rostrum* long, comparatively stout, feebly incurved to middle, sculpture

entirely concealed on basal half, apical half feebly shining and with numerous minute punctures. Second joint of funicle about once and one-third the length of 1st. *Prothorax* apparently slightly longer than wide, but in reality feebly transverse ($5 \times 4\frac{1}{2}$), almost flat, apical fifth rounded, sides almost parallel, base strongly bisinuate, scutellar lobe acute. *Scutellum* indistinct. *Elytra* very large, base strongly bisinuate, widest about middle, sides near apex rather suddenly arcuate; basal half with five transverse series of large punctures, sides with four rows of distinct punctures; shoulders produced, oblique and tuberculate; each side of scutellum subtuberculate. *Legs* long; femora thickened, almost edentate, posterior terminating level with suture of 4th and 5th abdominal segments. Length $13\frac{1}{2}$, rostrum 4; width $6\frac{1}{2}$ mm.

Hab.—N.S.W.: Richmond River.

The femoral teeth are represented by minute nodules, scarcely distinguishable on any but the anterior femora, and then only from certain directions. The rostrum is stouter than is usual.

PALETICUS SUBEREUS, Pasc.; Mast. Cat. Sp. No. 5488.

(*Petosiris subereus*, Pasc.).

Colour as in *pedestris*. Rather sparsely clothed with small round dull ochreous scales, and with larger and darker scales moderately densely distributed at apex of and forming four feeble fascicles across middle of prothorax; apical half of elytra densely but irregularly clothed, and with still larger scales having a tendency to run in single lines, tubercles subfasciculate. Under surface and legs rather more densely clothed than upper. Metasternum and basal segments of abdomen in addition with fine golden setæ in ♂.

Head with three feeble elevations on vertex, transversely impressed between eyes. Rostrum long, thin and parallel-sided, basal half densely punctate, apical half finely punctate and shining. Second joint of funicle twice the length of 1st. *Prothorax* somewhat convex, rounded from apex to base, with trace of four feeble elevations across middle, base strongly bisinuate.

Scutellum indistinct. *Elytra* cordate, impunctate, shoulders produced and tuberculate, a tubercle on each side of scutellum, and one on each each side behind it at about one-fifth from base, each side of suture at base with a row of from three to five small flattened and shining granules. *Legs* long; femora stout, strongly dentate, posterior passing apex of elytra. Length $7\frac{1}{2}$, rostrum $2\frac{3}{4}$; width $4\frac{1}{2}$; variation in length $7\frac{1}{4}$ -10 mm.

Hab.—Coastal Districts of Queensland and Northern New South Wales.

An exceedingly abundant species in the tropical scrubs, and of which it is not unusual to capture entirely abraded specimens. The male differs from the female in being narrower, rostrum shorter, stouter and feebly tricostate at base, and the scape inserted slightly nearer to apex of rostrum.

PALETICUS FRONTALIS, Pasc.; Mast. Cat. Sp. No. 5456.

Colour as in *pedestris*, except that the antennæ and tarsi are somewhat paler. Densely clothed with small ferruginous-brown scales, interspersed with larger ones, which on the prothorax are somewhat irregular but nowhere fasciculate, on the elytra they form rows (less noticeable towards the base) on the interstices. Scales of under surface somewhat irregular and slightly darker than above; tibiæ scarcely visibly annulate. Head and basal half of antennæ densely squamose.

Head with four shallow impressions leaving three elevated lines, transversely impressed and foveate between eyes; eyes more coarsely faceted than usual. Rostrum long and thin, basal half tricarinate; median carina shining, apical half feebly punctate and shining. Second joint of funicle about once and two-thirds the length of 1st. *Prothorax* strongly transverse, convex, apex rounded, basal two-thirds parallel-sided. *Scutellum* indistinct. *Elytra* briefly subcordate, considerably wider than prothorax, basal half subparallel, base trisinate; shoulders produced, oblique, basal half with strong punctures placed in transverse rather than in longitudinal series. *Legs* long; femora subelavate, rather

strongly dentate, posterior passing apex of elytra. Length $5\frac{1}{2}$, rostrum $1\frac{2}{3}$; width 3 mm.

Hab.—Coastal Districts of Queensland and Northern New South Wales.

A moderately common species. The male has a shorter and stouter rostrum than the female, and the antennæ are inserted slightly nearer the apex. The elytra about the scutellum and shoulders are not tuberculate. Mr. Pascoe appears to have regarded the frontal impressions as rather an unusual character; they are, however, noticeable in all the species of *Paleticus* and many allied genera.

PALETICUS CORDIPENNIS, Pasc.; Mast. Cat. Sp. No. 5487.

(*Petosiris cordipennis*, Pasc.).

Colour as in *pedestris*. Rather densely clothed with small ferruginous-brown scales, larger and fasciculate on tubercles. Legs with longer scales; head and basal third of rostrum densely squamose.

Head with three feeble elevations, a transverse impression between eyes. Rostrum long, feebly incurved to middle, base tricostate, apical half feebly punctate and shining. Second joint of funicle about once and one-half the length of 1st. *Prothorax* strongly transverse, convex, basal two-thirds scarcely parallel; four very feeble tubercles placed transversely across middle. *Scutellum* distinct, transverse, level with elytra. *Elytra* briefly subcordate, much wider than prothorax, each feebly separately rounded at apex, subseriately punctate, punctures large near base, base near scutellum slightly thickened, shoulders produced; each with five tubercles on basal half, two on the 3rd, two on the 5th, and one projecting laterally on the 7th just behind the shoulders, several other feeble tubercles towards sides. *Legs* long; femora subelavate, posterior just passing apex of elytra. Length 7, rostrum 2; width 4 mm.

Hab.—Queensland; New South Wales.

The laterally projecting tubercle just behind the shoulder is very distinctive of this species.

P. LATICOLLIS, Pasc.; Mast. Cat. Sp. No. 5458. *Hab.*—Queensland. I have several specimens which agree fairly well with Mr. Pascoe's description of this species, except that the 2nd joint of the funicle is decidedly longer than the 1st.

P. CONFINIS, Pasc.; Mast. Cat. Sp. No. 5455. *Hab.*—Wide Bay. Mr. Masters has lent me a specimen from Wide Bay which is probably *confinis*; besides the characters mentioned by Mr. Pascoe, it differs from the specimens I doubtfully refer to *laticollis* in having the femora and rostrum decidedly shorter and thicker.

P. INVIDUS, Pasc.; Mast. Cat. Sp. No. 5457. *Hab.*—"Gawler, S.A.; Victoria; Sydney; Queensland." Although this appears to be a widely distributed species, I have seen nothing approaching Mr. Pascoe's description.